

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Business Meeting)
)
_____)

CALIFORNIA ENERGY COMMISSION
HEARING ROOM A
1516 NINTH STREET
SACRAMENTO, CALIFORNIA

WEDNESDAY, APRIL 26, 2006

10:05 A.M.

Reported by:
Peter Petty
Contract No. 150-04-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMISSIONERS PRESENT

Joseph Desmond, Chairperson

Arthur Rosenfeld

James D. Boyd

John L. Geesman

STAFF PRESENT

B.B. Blevins, Executive Director

William Chamberlain, Chief Counsel

Melinda Dorin

Elaine Hebert

Norman Bourassa

Ricardo Amon

Ram Verma

Heather Raitt

Gabriel Herrera

Gary Flamm

Michael Martin

Mark Rawson

PUBLIC ADVISER

Margret Kim

ALSO PRESENT

Gregory Tropsha
ICE Energy

Mark Skowronski
Solargenix

ALSO PRESENT

Joseph Rokowski
Rohn & Haaf
(via teleconference)

Les Guliassi
Pacific Gas and Electric Company

Manuel Alvarez
Southern California Edison Company

Steven Kelly
Independent Energy Producers Association

Pete Palm
Western Pacific Distribution

Gary Fernstrom
Pacific Gas and Electric Company

Steve J. Provol
Competitive Energy Insight, Inc.

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P R O C E E D I N G S

10:05 a.m.

CHAIRPERSON DESMOND: Good morning. I'd like to welcome everyone here today to this business meeting. Would you please rise and join me in reciting the Pledge of Allegiance.

(Whereupon the Pledge of Allegiance was recited in unison.)

CHAIRPERSON DESMOND: Just as a reminder, if anyone wishes to address the Commission on various items be sure and notify us, blue cards here at the front.

First item on the agenda is the consent calendar.

COMMISSIONER ROSENFELD: I move the consent calendar.

COMMISSIONER GEESMAN: Second.

CHAIRPERSON DESMOND: All those in favor?

(Ayes.)

CHAIRPERSON DESMOND: Opposed? So moved.

Agenda item number 2, the Clean Energy States Alliance. Possible approval of contract 500-05-036 for \$25,000 with Clean Energy States

1 Alliance to establish a national collaborative to
2 develop national guidelines that address the risk
3 to birds from the siting and operation of wind
4 energy facilities. Ms. Dorin.

5 MS. DORIN: Good morning, Commissioners.
6 This proposal is to help fund a national
7 collaborative with the Clean Energy States
8 Alliance and other stakeholders, including the
9 National Audubon Society, the U.S. Fish and
10 Wildlife Service and the American Wind Energy
11 Association. And that also includes the member
12 states, including us, which is California.

13 And the amount is for \$25,000 from the
14 Energy Resources Program Account, which is the
15 ERPA Fund. And this national effort is focused on
16 developing a framework document that the states
17 can then implement. And the goal is to allow for
18 wind development while reducing avian impacts.

19 This process will be a parallel process
20 to the state guidelines development that the
21 Energy Commission is undertaking. And in order
22 for California to have direct input into the
23 national framework, make sure it's consistent with
24 the state guidelines, it's important for us to be
25 involved in that process.

1 CHAIRPERSON DESMOND: Thank you.

2 COMMISSIONER GEESMAN: Mr. Chairman.

3 CHAIRPERSON DESMOND: Commissioner
4 Geesman.

5 COMMISSIONER GEESMAN: I'll move the
6 item and note that we will be bringing an OII to
7 one of the Commission's May business meetings to
8 launch the state guideline setting process.

9 CHAIRPERSON DESMOND: Excellent, thank
10 you. Further questions? Comments?

11 COMMISSIONER BOYD: I'll second.

12 CHAIRPERSON DESMOND: All those in
13 favor?

14 (Ayes.)

15 CHAIRPERSON DESMOND: Opposed? So
16 moved. Thank you.

17 Agenda item number 3, Moss Landing
18 Marine Laboratory. I would note that this is PIER
19 funded, not ERPA funded. That's a correction in
20 the agenda.

21 And this is possible approval of five
22 proposals totaling \$634,932 for the Moss Landing
23 Marine Laboratory under the existing San Jose
24 State University Foundation contract to study the
25 effects of once-through cooling technology. Ms.

1 Dorin.

2 MS. DORIN: Good morning, Commissioners.

3 CHAIRPERSON DESMOND: Good morning.

4 Nice to see you again.

5 (Laughter.)

6 MS. DORIN: So, as you noted, this is
7 actually an existing contract with Moss Landing.
8 It was funded and the contract was signed with the
9 California Energy Commission in May 2005 for \$1.5
10 million. And so this is for research under that
11 contract.

12 So, in November of 2005, an RFP was
13 released. And the RFP sought proposals to address
14 the impact of once-through cooling on aquatic
15 species. And it was pretty broad. We're looking
16 at population communities, technology development,
17 anything to resolve the significant ecological
18 effects of impingement, entrainment, thermal. We
19 gave a lot of, a broad scope for the RFP.

20 We did receive 12 proposals. And the
21 Technical Advisory Committee met; scored the
22 proposals. And staff has five proposals that they
23 would like to take forward for approval.

24 And the members of the Technical
25 Advisory Committee were made up of industry, of

1 consultants that do a lot of the monitoring for
2 the power plant operators, NMFS, Regional Board,
3 the State Board Ocean Protection Council Staff.
4 So federal agencies, state agencies got a chance
5 to look at the proposals.

6 And so just a brief summary of all of
7 the proposals in no particular order. The first
8 one is, the PI is Daniel Pondella, and they have a
9 long-term data set from Redondo Beach, California.
10 And that's near three power plants including
11 Redondo Beach, Scattergood and El Segundo.

12 And they have a data set from 1974 to
13 2006, so they can look at ecological changes and
14 address some of the questions about how often to
15 sample. So they'll do a temporal look at the data
16 to see el nino events and things like that. And
17 that's really important for a sampling that the
18 operators have to do under their regulatory
19 requirements.

20 The second one, Jon Largier; and he is
21 with UC Davis. And he will be doing both the
22 modeling exercise and looking on the ground at the
23 intake withdrawal zone. So modeling the bays, and
24 he will be doing this at Huntington Beach and
25 Morro Bay, as two sample cases. But he'll also be

1 setting up a protocol that can be used at other
2 sites. This information also feeds into the
3 models used currently.

4 The third one, Joseph Cech. He's with
5 UC Davis, and he will be looking at screen
6 technology and whether there's something that can
7 be done to the screens to make the fish see them
8 at an earlier time so they can avoid the intake.
9 And that will be in the lab. And he will be
10 looking at (inaudible) smelt, as well as some
11 coastal smelt.

12 And then the fourth one, by Jonathan
13 Geller; he's with Moss Landing. And he will be
14 looking, setting up a protocol looking up of
15 methods to do DNA extraction. So one of the
16 constraints right now in the sampling is that they
17 can only ID a certain amount of the species. So
18 where they can't ID morphologically they'll have a
19 tool to look at more of the species.

20 And then the last one, Charles Mitchell.
21 he is looking at the life history of three species
22 that are commonly caught in southern California.
23 And those species are queenfish, white croaker and
24 spot-fit croaker. And these species feed into the
25 models once again if they don't have life history.

1 This will allow the models to be more accurate
2 when they're used.

3 And the amounts of the studies, the
4 Pondella is requesting \$53,000; Jon Largier is
5 requesting \$197,000; Joseph Cech was requesting
6 \$152,000; and I've rounded on these; Jonathan
7 Geller has requested \$137,000; and Charles
8 Mitchell has requested 93. And then there's also
9 \$117,000 in matched funds that they've received.

10 CHAIRPERSON DESMOND: Great, thank you.

11 MS. DORIN: You're welcome.

12 CHAIRPERSON DESMOND: Commissioner
13 Geesman.

14 COMMISSIONER GEESMAN: I'll move the
15 item.

16 COMMISSIONER ROSENFELD: Second.

17 CHAIRPERSON DESMOND: All those in
18 favor?

19 (Ayes.)

20 CHAIRPERSON DESMOND: Opposed? So
21 moved. Thank you.

22 Before we begin the next agenda item I
23 just have a question. I have a card from a Mr.
24 Spillet, but no agenda item identified on that.
25 If somebody would just please let me know. Peter

1 Spillet. Not here? Okay.

2 Agenda item number 4. Cool Roof
3 Coatings Performance Requirements. Possible
4 adoption of proposed 15-day language amendments to
5 the 2005 building energy efficiency standards of
6 the California Code of Regulations, Title 24, part
7 6, section 118(i)3.

8 This is regarding performance
9 requirements of liquid roof coatings applied in
10 the field on nonresidential low-sloped roofs. Ms.
11 Hebert.

12 MS. HEBERT: Good morning,
13 Commissioners, colleagues. My name is Elaine
14 Hebert or Hebert, whichever mood you're in. And
15 I'm with the building and appliances office in the
16 efficiency renewables and demand analysis
17 division.

18 This item has been a long haul. On
19 April 13, 2005, the Energy Commission accepted a
20 petition to initiate a rulemaking to consider
21 changes to this one small section of the 2005
22 building standards.

23 There are two basic issues. First is
24 what are acceptable tests for testing the physical
25 performance of liquid applied roof coatings at

1 cold temperatures in order to show some kind of
2 durability in cold climates. As it turns out,
3 there are standards for such testing developed by
4 the American Society for Testing and Materials, or
5 ASTM.

6 The second issue is the thickness that
7 these coatings dry to, given in units of mils, to
8 insure some level of durability over a variety of
9 substrates.

10 To address the first issue, we are
11 proposing to add an extra optional ASTM test for
12 flexibility, adding it to the existing list of
13 tests for tensile strength and elongation at low
14 temperatures.

15 To address the second issue we are
16 proposing to remove the specified minimum dry mil
17 thickness of 20 mils, and instead allow the
18 manufacturers' recommendation for thickness or
19 coverage, taking the particular substrate into
20 consideration.

21 We are also adding the appropriate ASTM
22 standards to two sections of the building
23 standards that lists referenced documents. And
24 lastly, we are proposing some clarifying language
25 to section 118(i)3 such as adding the phrase, "for

1 low-sloped roofs" where appropriate, to remove any
2 ambiguity.

3 We have made these proposals with
4 substantial input from industry over the last
5 year. We thank industry members and other
6 stakeholders for working with us, and we look
7 forward to working with them to further refine our
8 roof coating standards for 2008 and the future.

9 CHAIRPERSON DESMOND: Great. Thanks,
10 Ms. Hebert. I would note we did have one speaker
11 on the phone who would like to address the
12 Commission. But first, let me ask the
13 Commissioners if they have any questions or
14 comments.

15 On the phone right now is Mr. Joseph
16 Rokowski of Rohn & Haaf. Mr. Rokowski?

17 MR. ROKOWSKI: Yes.

18 CHAIRPERSON DESMOND: Please go ahead.

19 MR. ROKOWSKI: Just a few comments for
20 the record. I'll be pretty brief. There's been a
21 lot of controversy from suppliers regarding the
22 removal of the film thickness specification.

23 I think Elaine's done a commendable job
24 on handling all of that. I know there's been a
25 lot of controversy.

1 The concern is that this opens up the
2 opportunity for lower quality coatings out there
3 in the market. If a manufacturer decides to set a
4 specification that is very thin, it could last for
5 only a brief period of time on the roof. And that
6 could avoid the energy savings that everybody is
7 aiming for.

8 I mean we don't necessarily agree with
9 the 20 mil dry film thickness; we certainly don't
10 agree with the full removal of firm film thickness
11 spec'd for that.

12 We would recommend that it got switched
13 off to the delay of change to be switched in 2008
14 ruling. And I know that's underway, instead of
15 being changed for the 2005 regulations. I mean
16 we're not really tied to the 20 mil film
17 thickness. But the recommendation to remove it
18 occurred quickly. We think there's not been
19 enough time to air all the facts.

20 We'd like an organized and a systematic
21 assessment to occur before it was implemented, and
22 we think that's suitable in a 2008 timeframe.

23 I think there's a minimum film thickness
24 under which neither the State of California or the
25 elastomer roof coating industry needs will be met.

1 And that's kind of the basis for the comments.

2 That's all I have to say, thanks.

3 CHAIRPERSON DESMOND: Thank you, Mr.
4 Rokowski. Commissioner Rosenfeld.

5 COMMISSIONER ROSENFELD: Elaine
6 Hebert, --

7 (Laughter.)

8 MS. HEBERT: I like the sound of that.

9 COMMISSIONER ROSENFELD: I grew up in
10 Louisiana. Would you respond to this suggestion
11 that it be taken up again in 2008?

12 MS. HEBERT: I think that's a great
13 idea. We got a lot of education over the last
14 year. The 20 mils was based mostly for coatings
15 that have acrylics in them. We learned that there
16 are many other chemistries of coatings out there;
17 that some of them will perform well at less than
18 20 mils.

19 We tried a number of different angles to
20 address this. We ended up with the manufacturers'
21 recommendation. We figure it's going to be hard
22 to regulate; that people trying to go under the
23 radar screen or people trying to sell an inferior
24 product. We find it difficult to regulate how we
25 would control that inferior products would be out

1 there.

2 We hope to educate building owners who
3 will be making decisions about these products so
4 that they'll know perhaps, not always, but if you
5 spend little money you might get, you know, it's
6 buyer beware kind of thing.

7 So we hope to do some education so that
8 people will make informed decisions about the
9 products they buy for their roofs. It'll take
10 some time.

11 COMMISSIONER ROSENFELD: But our friends
12 at Rohn and Haaf can be comfortable that it will
13 get reconsidered?

14 MS. HEBERT: Yes, absolutely. And we're
15 counting on their help.

16 COMMISSIONER ROSENFELD: Okay. Then I
17 move the item.

18 COMMISSIONER GEESMAN: Second.

19 CHAIRPERSON DESMOND: All those in
20 favor?

21 (Ayes.)

22 CHAIRPERSON DESMOND: Opposed? So
23 moved. And, Mr. Rokowski, thank you for your
24 comments. We'll make sure we keep an eye on that
25 and the staff pays close attention.

1 MR. ROKOWSKI: Thank you.

2 CHAIRPERSON DESMOND: The next item on
3 the agenda, California Commissioning
4 Collaborative. Possible approval of contract 500-
5 05-035 for \$400,000 with the California
6 Commissioning Collaborative to develop
7 standardized commercial building commissioning and
8 retrocommissioning strategies and tools improving
9 building performance and reduce energy demand.
10 Mr. Bourassa.

11 MR. BOURASSA: Good morning,
12 Commissioners, Directors and attendees. My name
13 is Normal Bourassa, Bourassa if you want the
14 French pronunciation.

15 (Laughter.)

16 MR. BOURASSA: From the PIER buildings
17 program. This contract proposes building
18 commissioning research funded by the PIER electric
19 program. The total cost, as you just said, is not
20 to exceed \$400,000 over the three years.

21 Building commissioning is best defined
22 as a process of insuring that systems are designed
23 and installed, functionally tested and certified
24 capable of being operated and maintained according
25 to the owner's operational needs.

1 Commissioning applies to new
2 construction and retrocommissioning applies to
3 existing buildings, just to help define those two
4 terms.

5 Over the last half decade commissioning
6 and retrocommissioning have proven to be effective
7 strategies to identify and correct problems that
8 cause energy waste in building systems and
9 operations.

10 However, communicating these benefits to
11 building owners and managers has proved difficult.
12 And a better understanding of their concerns
13 should be formalized. Moreover there is a
14 shortage of standardized engineering tools, guides
15 for the rapidly growing building commissioning
16 provider industry.

17 The contractor, the California
18 Commissioning Collaborative, commonly known as the
19 CCC, is a nonprofit organization dedicated to
20 making building commissioning common practice in
21 California. The CCC provides near-term market
22 connections for commissioning-related R&D
23 products. And is providing strategic guidance to
24 the PIER buildings program in the identification
25 of future research needs.

1 This contract proposal will employ the
2 unique nature of the CCC to help PIER buildings
3 manage new commissioning related R&D over the next
4 three years. And the proposed work includes a
5 market research project aimed at clearly
6 characterizing the value of commissioning for
7 building owners and decisionmakers, as well as
8 develop technology transfer strategies.

9 Additionally, there's projects for
10 commissioning and retrocommissioning tools to
11 provide strategic resources for the commissioning
12 providers, helping them to market and deliver
13 their services in a more consistently and cost
14 effectively than has been in the past.

15 The CCC is at the forefront of building
16 commissioning research nationally. And it is the
17 understanding of PIER buildings that this work is
18 not duplicative of any previous or current
19 commissioning research effort.

20 The project is included in the 2005/2006
21 PIER buildings budget and the R&D Committee has
22 approved it. And I'll answer your questions.

23 CHAIRPERSON DESMOND: Great. Thank you.

24 COMMISSIONER ROSENFELD: The R&D
25 Committee thinks unanimously the commissioning is

1 pretty darned important, so I move the item.

2 COMMISSIONER GEESMAN: Second.

3 CHAIRPERSON DESMOND: Okay, I would only
4 note that Commissioner Pfannenstiel worked very
5 hard on the report we adopted here at the
6 Commission, which emphasizes the importance of
7 building commissioning. So this is very important
8 work, and I appreciate the detail you went into in
9 explaining the benefits of that today, so.

10 MR. BOURASSA: Thank you.

11 COMMISSIONER ROSENFELD: And, Mr.
12 Bourassa, you're in for this on the long haul,
13 too.

14 MR. BOURASSA: Yes, I am.

15 CHAIRPERSON DESMOND: Yes, so great.
16 And thank you. So, with that I'll just call for
17 the vote.

18 All those in favor?

19 (Ayes.)

20 CHAIRPERSON DESMOND: Opposed? So
21 moved. Thank you.

22 MR. BOURASSA: Thank you.

23 CHAIRPERSON DESMOND: Agenda item number
24 6. Thomas Taranto. Possible approval of contract
25 400-05-019 for \$12,000 to conduct a compressed air

1 systems assessment at Del Monte Foods Modesto
2 Plant.

3 As part of the Energy Commission's food
4 industry resource efficiency program the project
5 will also provide a case study on compressed air
6 systems, including recommendations on how industry
7 can improve the efficiencies of the system. Mr.
8 Amon.

9 MR. AMON: Good morning. My name is
10 Ricardo Amon; I'm with the public programs office
11 in the efficiency, renewables and demand analysis
12 office.

13 The purpose of this \$12,000 contract is
14 to conduct a compressed air system assessment at
15 the Del Monte Foods Plant in Modesto.

16 This project is one of several
17 activities the Energy Commission has undertaken to
18 promote the use of energy efficient best practices
19 and technologies in the food industry.

20 The contract with Mr. Taranto is funded
21 from a \$71,800 contract the Commission was
22 awarded, as a member of Western States Food
23 Industry Resource Efficiency program. This
24 multistate program received \$750,000 from the U.S.
25 Department of Energy's state technologies

1 advancement collaborative.

2 The other program partners include the
3 Oregon Department of Energy, Washington State
4 University Energy Office and the Idaho Department
5 of Water Resources, the California League of Food
6 Processors, the Northwest Food Processors
7 Association, Del Monte Foods and the Lawrence
8 Berkeley National Laboratory.

9 This contract has allowed the Energy
10 Commission to advance the state's energy policy
11 loading order goals by promoting energy
12 conservation, efficiency and peak loaded option in
13 the food processing industry, a large energy end-
14 use consumer group.

15 This industry generates \$60 billion to
16 the state's economy, and it is the third largest
17 industrial energy user. On an average year the
18 industry consumes 50 to 100 gigawatt hours of
19 electricity, and over 600 million therms of
20 natural gas.

21 Although the contract with Mr. Taranto
22 is targeting the compressed air systems which can
23 consume between 10 to 20 percent of the electrical
24 load in a typical food processing facility, the
25 Energy Commission's efforts have also conducted

1 steam and process heat system assessments.

2 The implementation of system assessment
3 recommendations can, on average, lead to 10 to 20
4 percent in energy savings.

5 The compressed air system assessment at
6 Del Monte Foods will further promote energy
7 efficiency in the food industry. The results of
8 the study will be used to transfer the findings in
9 a case study report to disseminate the benefits of
10 conducting these type of system assessment work.

11 The contract has been approved by the
12 Energy Commission -- by the Energy Efficiency
13 Committee. And we recommend approval. And I'm
14 able to answer, for questions.

15 CHAIRPERSON DESMOND: Thank you.

16 COMMISSIONER ROSENFELD: I move the
17 item.

18 COMMISSIONER GEESMAN: Second.

19 CHAIRPERSON DESMOND: Mr. Amon, I have
20 been to this facility; it's very impressive what
21 they've done so far. So, I'm pleased to see that
22 they're continuing to invest in these types of
23 projects.

24 All those in favor?

25 (Ayes.)

1 CHAIRPERSON DESMOND: Opposed? So
2 moved. Thank you.

3 MR. AMON: Thank you.

4 CHAIRPERSON DESMOND: Agenda item number
5 7, the 2005 building energy efficiency standards
6 credit option. This is possible approval of a
7 compliance option for distributed ice energy
8 storage systems under the 2005 building energy
9 efficiency standards. And this option is designed
10 to provide compliance credit for ice energy
11 storage systems installed in residential and
12 nonresidential buildings as a way of reducing peak
13 energy demand. Mr. Verma.

14 MR. VERMA: Good morning, Commissioners.
15 My name is Ram Verma. Staff is requesting
16 approval of a compliance option for ice storage
17 air conditioners used for residential and
18 nonresidential buildings.

19 Ice storage air conditioners save energy
20 during the peak periods by shifting electric load
21 to offpeak periods. These units make ice during
22 the night; during the day buildings are cooled by
23 melting the ice that is stored in the tank. The
24 compressor usually doesn't run during the peak
25 periods.

1 Approval of this compliance option will
2 allow compliance credit for all ice storage air
3 conditioners that meet eligibility criteria and
4 acceptance requirements specified in the staff
5 report.

6 In order to qualify for compliance
7 credit mandatory duct testing and sealing is
8 required for low rise residential buildings.

9 Approval of this compliance option will
10 not have any significant environmental impact.
11 This proposal has been approved by Efficiency
12 Committee. And I'm open to questions.

13 CHAIRPERSON DESMOND: Great. Questions
14 or comments? We have one public speaker.

15 Mr. Greg Tropsa.

16 MR. TROPSA: Tropsa.

17 CHAIRPERSON DESMOND: Tropsa. You know,
18 this is the fifth person I think I've gotten the
19 name pronounced mis-correctly this morning here.
20 Please identify yourself for the record.

21 MR. TROPSA: Greg Tropsa, President of
22 Ice Energy. I have less than two minutes of
23 prepared remarks.

24 Peak demand, driving by building air
25 conditioning, poses one of California's most

1 significant challenges to insuring reliable
2 electricity supplies.

3 Today we seek your approval for a new
4 class of market transformational technology, an
5 environmentally friendly and efficient distributed
6 energy resource referred to today as ice storage
7 air conditioning. This is truly a landmark event,
8 one that has the potential to transform the power
9 industry.

10 For the first time since the invention
11 of modern air conditioning, itself, Ice Energy's
12 technology reverses the trend of peakier peaks by
13 breaking the relationship between rising daytime
14 temperature and increasing summer electricity
15 demand.

16 Wide-scale deployment of efficient
17 distributed energy storage resources for
18 residential through commercial rooftop air
19 conditioners is one of the largest opportunities
20 we have right now to address the peak demand
21 situation. And importantly, storage complements,
22 improves value and accelerates the adoption of
23 solar PV, wind and other intermittent renewable
24 energy resources.

25 Distributed energy storage is also a new

1 class of capacity resource and is the best defense
2 against rare heat storms. In the words of Bob
3 Foster, your technology normalizes the weather.
4 Adverse system congestions driven by heat will one
5 day be a thing of the past.

6 Distributed energy storage is good for
7 the environment, too. Shifting load to offpeak
8 reduces NOx, CO2 and reduces the potential for
9 smog formation.

10 We would like to acknowledge and thank
11 Marcie Edwards, General Manager of Anaheim's
12 Municipal Utility, and former Interim President of
13 the California ISO. Marcie was the first utility
14 executive in the state to embrace this technology.
15 Anaheim also plans to be the first utility in the
16 state to approve a complimentary package of
17 incentives and tariffs to drive the rapid adoption
18 of distributed energy storage.

19 We acknowledge the Southern California
20 Public Power Association and its member utilities
21 for their support. The City of Victorville, who
22 was the first city to embrace and widely deploy
23 Ice Energy's technology on the majority of their
24 city-owned buildings. They see this not only as a
25 great opportunity for economic development, but as

1 the right thing to do.

2 And finally, to thank the CEC Staff for
3 their consideration and recommendation to support
4 ice storage air conditioners as an approved
5 compliance option method.

6 CHAIRPERSON DESMOND: Thank you very
7 much. Just wanted to add here a moment that at
8 our joint Energy Agency Action Plan meeting
9 earlier this week we noted two things. One was
10 that the state is not necessarily staying on track
11 with meeting its demand response goals. And
12 secondly, the importance of time-differentiated
13 pricing and providing evaluation for the types of
14 benefits this technology offers.

15 And so I would like to also recognize
16 the work of the public power utilities in
17 encouraging and working with staff here, as well
18 as the Commissioners here, who have been
19 supporting the development and demonstration of
20 this. I think it's one of the most exciting
21 opportunities, and would echo those sentiments.
22 It truly provides a huge opportunity and would
23 hope that the other utilities will look carefully
24 at this, as well, to help get the state back on
25 track.

1 Commissioner Rosenfeld.

2 COMMISSIONER ROSENFELD: Yeah, I just
3 want to say the same sort of thing. Maybe I'm
4 redundant, but, Greg, I hope you are the
5 beginnings of a renaissance in thermal storage.
6 That's great. It was popular at the beginning of
7 the, oh, I don't know, the late '70s. And then it
8 somehow or other didn't have the right sorts of
9 supports.

10 But now, as Chairman Desmond just said,
11 we have time-dependent valuation of electricity,
12 which makes you cost effective in analysis. And
13 we're going to have, over the next ten years, 10-
14 or 12-million interval meters and tariffs which
15 will cause people to pay attention to you.

16 So I hope that all works wonderfully,
17 and good luck.

18 COMMISSIONER GEESMAN: I'll make the
19 motion, then, if Commissioner Rosenfeld did not,
20 that we accept this item.

21 COMMISSIONER ROSENFELD: Second.

22 CHAIRPERSON DESMOND: All those in
23 favor?

24 (Ayes.)

25 CHAIRPERSON DESMOND: Opposed? So

1 moved. Thank you, Mr. Verma.

2 MR. VERMA: Thank you.

3 CHAIRPERSON DESMOND: Agenda item number
4 8, the Overall Program Guidebook and possible
5 adoption of the April 2006 revisions to the
6 overall program guidebook for renewable energy
7 program. The guidebook is providing specific
8 information on how the Commission's renewable
9 energy program is administered. The proposed
10 changes include revising and updating various
11 definitions.

12 I would note we do have two speakers for
13 agenda item 8, and one for 9. Nine is related to
14 that. But why don't we take up number 8 first.
15 Ms. Raitt.

16 MS. RAITT: Thank you. Good morning,
17 Commissioners. I'm Heather Raitt from the
18 renewable energy program. And these are proposed
19 edits to the guidebooks which we use to implement
20 the RPS program here at the Energy Commission that
21 we implement collaboratively with the CPUC.

22 And just to give a brief background that
23 applies to items 8, 9 and 10 on the agenda, the
24 guidelines implement our rules for implementing,
25 excuse me, the RPS statutes, which are to certify

1 eligibility of renewable facilities as eligible
2 for the RPS and eligible for supplemental energy
3 payments. Certify incremental geothermal
4 production. Design and implement an RPS tracking
5 and verification system. And award supplemental
6 energy payments.

7 And we have the ability to revise the
8 guidebooks as needed, to respond to public
9 comments, lessons learned and statutory and market
10 and regulatory developments. And those are the
11 reasons for our proposed changes today.

12 We've gone through a public process to
13 vet these changes. Initially the draft guidebooks
14 were released in November 2005 for comment. We
15 held a workshop on December 7th. And we
16 subsequently revised the guidebooks again and held
17 a second workshop April 17th to discuss the
18 proposed changes.

19 And we bring these forward to you today
20 for your proposed consideration for adoption.

21 The changes to the overall guidebook, as
22 you mentioned, are to revise and update
23 definitions, particularly to awardee commercial
24 operations, community choice aggregator, electric
25 service provider, electric corporation and retail

1 sellers. And these are primarily, as I mentioned,
2 to respond to comments we've received and to
3 update the definitions according to regulatory and
4 other changes.

5 And then I, if you'd like I can present
6 the other guidebooks separately.

7 CHAIRPERSON DESMOND: If you don't mind,
8 we'll take up item number 9 right now, at the same
9 time, which is the portfolio standard eligibility
10 guidebook. And the adoption of the April 2006
11 revisions.

12 MS. RAITT: So the RPS eligibility
13 guidebook has more extensive changes. It changes
14 really to updating to be consistent with CPUC
15 decisions, to implement AB-200, which applies to
16 multijurisdictional utilities that serve
17 California customers.

18 It's also implements rules to -- or,
19 excuse me, guidelines to certify incremental
20 geothermal production; to offset or quantify how
21 much generation is produced, as what qualifies as
22 incremental geothermal.

23 We've also made edits to the delivery
24 requirements, to clarify that parties can
25 negotiate delivery terms, including which party is

1 responsible for transmission rights along the
2 transmission path.

3 We clarify various RPS-specific
4 eligibility criteria for fuels, including the
5 biomass facility seeking SEPS are subject to the
6 California timber harvest plan requirements.

7 And that we also clarify that for the
8 RPS eligibility certificate we will show the
9 certification number, as well as the facility
10 size, fuel type, location and the owner.

11 And we've also clarified
12 precertification for the cases if a facility is
13 not yet online, the applicant can seek
14 precertification from the Energy Commission. And
15 we have a disaggregated applications, so there's
16 two separate applications. One for certification
17 and one for precertification.

18 We've made clarifying changes to the
19 tracking system describing the process of how we
20 conduct the verification consistent with RPS
21 procurement verification report.

22 We have proposed forms for generators to
23 report the amount of generation they produce on a
24 monthly basis; they report that annually. And
25 we've also revised the forms where the utilities

1 report to us their procurement to update those
2 forms, for example, to have them identify how much
3 procurement counts towards incremental procurement
4 target versus the baseline. And to implement the
5 tracking requirements for out-of-state delivery
6 and AB-200.

7 We also have a errata for this
8 guidebook. And if you'd like, I can go through
9 the errata proposed edits to this guidebook that
10 are subsequent to what was discussed at the April
11 17th workshop.

12 MR. HERRERA: Commissioners, if we have
13 time, --

14 CHAIRPERSON DESMOND: Please.

15 MR. HERRERA: -- I think it would be
16 best for the record to go through the errata,
17 since they are nonsubstantive kind of conforming
18 changes that were made only after we received
19 comments and after these draft guideline revisions
20 were published, so --

21 CHAIRPERSON DESMOND: Thank you, then
22 please proceed.

23 MR. HERRERA: -- for the record.

24 MS. RAITT: Okay. They clarify that the
25 RPS targets are annual and other clarifying

1 editorial changes to the discussion of targets.
2 Refer to the current CPC rulemaking and its
3 successor. Clarify that the delivery from out of
4 state could be delivered anywhere instate, not
5 just into Cal-ISO is applicable. CPC rules allow
6 delivery outside of Cal-ISO.

7 Clarifies the intent of the guidebook as
8 drafted in April 2006. Clarify application of AB-
9 200, that it applies to utilities that serve
10 60,000 or fewer customer accounts in California.
11 And make technical corrections to the NERC tag
12 references, such as to refer to point of receipt
13 rather than point of delivery. And to refer to
14 the NERC identification as a point-source name,
15 other than that NERC identification number.

16 Clarify that the retail sale and
17 facility may negotiate which party's responsible
18 for securing transmission at any point along the
19 delivery path. Clarify that a facility that is
20 not yet online may apply for precertification.
21 And, as I mentioned, we made two separate forms
22 for certification and precertification.

23 Clarify that if a facility uses fossil
24 fuel the annual percentage of fossil fuel be
25 included on the certificate of RPS eligibility.

1 And that if there are any changes to that annual
2 use of fossil fuel use, it needs to be reported to
3 the Energy Commission.

4 And for the delivery from out of state,
5 clarify that the verification is based on the
6 amount of energy procured, not simply the amount
7 generated.

8 And those are the proposed errata for
9 the RPS eligibility guidebook.

10 CHAIRPERSON DESMOND: Thank you.
11 Commissioners.

12 COMMISSIONER GEESMAN: I think she had
13 one other guidebook she was going to go through.

14 CHAIRPERSON DESMOND: Okay.

15 MS. RAITT: And I have one more
16 guidebook. We also have the new renewable
17 facilities guidebook. The proposed changes to
18 that guidebook are to clarify and update the
19 supplemental energy payment process. The
20 guidelines refer to a request for bid-specific
21 data for all bids submitted to the utilities in
22 response to the RPS procurement solicitations.
23 We also have implemented the prevailing
24 wage law. And made other changes including to
25 revise the supplemental energy payment

1 application; and to include request for milestones
2 for the project in the application. And the
3 request for the utilities advice letter filing to
4 the CPUC.

5 We also clarify that the funding
6 confirmation letter is -- may be conditional,
7 approval of the funding confirmation letter may be
8 conditional upon approval of the CPUC contract.
9 CPUC's approval of the contract, excuse me.

10 And we also make a clarifying reference
11 that to the existing account for cross-reference
12 between the accounts and the renewable energy
13 program.

14 We have two errata for this guidebook.
15 One is to clarify that the Energy Commission is
16 seeking data on each of the bids that the utility
17 receives. And the second is to clarify that the
18 utilities may seek confidential treatment on their
19 forms in which they report to us the data on the
20 bids that they receive. Previously we had
21 referred to the ability to apply the confidential
22 status on their SEP applications, but this just
23 adds that reference to their forms on the bid
24 data.

25 CHAIRPERSON DESMOND: We have two public

1 speakers so far. Mr. Skowronski from Solargenix.

2 MR. SKOWRONSKI: Thank you for the
3 opportunity to address the Commission. My name is
4 Mark Skowronski; I work for Solargenix. In the
5 renewable energy industry, as a whole, the
6 guidebook is basically the bible that we follow.
7 And we're having a problem with (inaudible).
8 Thank you.

9 This is the supplemental energy payment.
10 Heather referenced that there were changes. I
11 don't know if there's further changes in the last
12 couple weeks, but the problem we have is the
13 security of the SEP payment.

14 We're finding it extremely difficult, if
15 not impossible, to finance a project because of
16 the lack of security of payment. If you're
17 getting money from a lender they want to make sure
18 that we get paid so we can pay them.

19 And as it stands now, it's very very
20 difficult to finance a project. If we do not have
21 this addressed, then I would recommend that
22 immediate action be taken to address the
23 particular problem.

24 CHAIRPERSON DESMOND: Commissioner
25 Geesman.

1 COMMISSIONER GEESMAN: Commissioner
2 Pfannenstiel and I conducted the workshop, I guess
3 a week ago, two weeks ago. And Mr. Skowronski and
4 several others, including the representative from
5 TURN, made this point.

6 Both Commissioner Pfannenstiel and I
7 agree that it is an important concern. It's my
8 understanding that that concern has been
9 registered in the Legislature. And that there
10 will be steps taken to address it legislatively.
11 I believe Senator Perata's Office is looking at
12 this right now.

13 So, it would be my hope that this issue
14 will be able to be resolved in this legislative
15 session. It will take a change of statute in
16 order to resolve the question. We don't have the
17 authority within our guidebooks to create a
18 separate escrow account held by a third party.

19 And I think the financial markets will
20 require that type of third party escrow in order
21 to make the SEPs something that can be used in a
22 financing.

23 CHAIRPERSON DESMOND: Thank you for the
24 clarification. Does that address, as Commissioner
25 Geesman has identified, the encumbrance you need.

1 MR. SKOWRONSKI: Yes, thank you,
2 gentlemen.

3 CHAIRPERSON DESMOND: Great, thank you.
4 Mr. Guliassi.

5 MR. GULIASI: Good morning, thank you,
6 Chairman Desmond and Commissioners. I just want
7 to make two comments, or comment on two issues,
8 both of which were addressed in the comments we
9 filed with the Commission last week.

10 The first one has to do with
11 confidentiality, and I'll be brief on this. It'll
12 be no surprise to you that we believe that some
13 limited information should remain confidential for
14 some limited period of time. The kinds of
15 information we're talking about have to do with
16 contract terms and pricing.

17 We recognize the responsibility that
18 this Commission has to certify and establish
19 eligibility. We recognize the responsibility that
20 this Commission has to evaluate and award
21 supplemental energy payments. And we understand
22 that you need information to do your job and to
23 execute your legislative responsibilities and your
24 fiduciary duties.

25 So, just to be clear, this is not about

1 withholding any information from this Commission.
2 We believe this Commission is entitled to all the
3 information it needs to do its job. We're just
4 concerned about broad public disclosure and
5 disclosure to market participants.

6 We need, you know, to get down to
7 business and work out the terms of
8 confidentiality; precisely what information will
9 remain confidential and for what period of time.
10 But I believe a limited amount of information for
11 a limited period of time is justified. And we've
12 outlined some recommendations in our comments.

13 The second issue has to do with
14 eligibility of renewable projects. And again,
15 this is a topic that we addressed at length and in
16 some detail at the April 17th workshop. It has to
17 do with the eligibility of out-of-state
18 deliveries, particularly intermittent resources.

19 I think the changes in the guidebooks go
20 a long way toward making necessary clarifications
21 about eligibility. I think maybe more work needs
22 to be done as we move forward, just to understand
23 how, in reality, energy is delivered into
24 California and received into the California grid.

25 Just so you know, we're engaged right

1 now in some bilateral negotiations with wind
2 developers in the Northwest. We'll probably be
3 engaged with other wind developers as the result
4 of future RPS solicitations. And it's important
5 that we kind of work out some of the details of
6 this to insure that those deliveries are eligible
7 for the program.

8 I think what we'll do, we'll have an
9 opportunity soon, I'm hoping, to come to you with
10 some contracts that will demonstrate in a real
11 practical way how deliveries are made. And to
12 satisfy you that these deliveries are eligible for
13 the program.

14 And that concludes my remarks. If you
15 have any questions, I'd be happy to entertain
16 them.

17 CHAIRPERSON DESMOND: Any further
18 questions?

19 MR. GULIASI: Thank you very much for
20 your time.

21 CHAIRPERSON DESMOND: Thank you for
22 those comments. Look for a motion.

23 COMMISSIONER GEESMAN: Mr. Chairman, is
24 it your preference that we have a single motion
25 for all three --

1 CHAIRPERSON DESMOND: Single motion for
2 all three.

3 COMMISSIONER GEESMAN: I'll make that
4 motion.

5 MR. HERRERA: Commissioner Geesman, can
6 I interrupt? I apologize. But just for the
7 record, need -- make a couple statements
8 concerning CEQA. The legal office reviews these
9 guideline revisions every time they come about to
10 make sure we comply with CEQA.

11 We did that. The adoption of these
12 guidelines is not a project under CEQA because it
13 deals with a continuing administrative matter
14 related to general policy and funding mechanisms.
15 There's a specific exemption that calls it out
16 it's not a project, and that is in California Code
17 of Regulations, Title 14, sections 15378(b)2 and
18 4.

19 So, just for the record, this issue is
20 not -- or the adoption of these guidelines is not
21 subject to CEQA.

22 CHAIRPERSON DESMOND: Thank you for the
23 clarification. I apologize to Commissioner
24 Geesman. Mr. Alvarez from Edison had indicated he
25 wanted to address agenda item number 10.

1 So, since we're taking them
2 collectively, if you would.

3 MR. ALVAREZ: Good morning,
4 Commissioners. Manuel Alvarez, Southern
5 California Edison. I apologize, I didn't realize
6 you were doing 8, 9 and 10. I thought it was only
7 8 and 9.

8 But item 10 is the new renewable
9 facilities program guidebooks, and the issue I'd
10 like to raise is follow up with PG&E's comment
11 dealing with the confidentiality issue.

12 We sent the Commission a letter
13 outlining our concerns about the scope in which
14 confidentiality is granted or not granted. The
15 errata basically gives us an opportunity in which
16 to apply, which was always available to us in
17 either case. So, we don't think we've made any
18 real progress in that particular area.

19 The use of the guidebooks, primarily
20 Edison has supported the use of the guidebooks for
21 this particular program since its inception.
22 Primarily for the reasons that Heather brought to
23 your attention earlier in terms of the fluidness
24 of the program, the changes in dynamics of the
25 program, the market structure and the entire

1 activity we went through.

2 And for that reason the guidebook
3 approach has been worthwhile. But, I think in
4 this particular case we have failed to kind of
5 address the confidentiality questions that we need
6 to address within the new program, the new
7 renewable program is something I think we need to
8 do.

9 The Commission does have an open
10 process, an open OIR dealing with data collection,
11 which we will start addressing on May 2nd. That's
12 going to put a lot of questions into discussion
13 about data and the scope. And I guess we would
14 have preferred to have some discussion here on
15 confidentiality within the guidebooks on this
16 particular program, as opposed to pushing them
17 over.

18 So, with that comments, those are our
19 concerns. And we would hope the Commission would
20 address the confidentiality question. Thank you.

21 CHAIRPERSON DESMOND: Thank you.
22 Commissioner Geesman.

23 COMMISSIONER GEESMAN: Yeah, Mr.
24 Alvarez, as you well know, we are simply on
25 different planets when it comes to what the

1 statutes and the State Constitution require in
2 terms of confidentiality.

3 The way our process works, as you well
4 know, the first call on that issue is made by our
5 Executive Director. As a consequence,
6 Commissioner Pfannenstiel and I did not feel it
7 was appropriate to preemptively address that
8 question in these guidebooks.

9 But I would remind you, as we brought up
10 repeatedly, in the IEPR process last year, there
11 is no aspect of utility regulation that suffers
12 from a greater lack of transparency than the
13 procurement aspect. This is a program, the
14 renewable portfolio standard, which is now
15 becoming, I think, widely regarded as off track.

16 So I don't think there's a single
17 candidate that better recommends itself for more
18 transparency than the RPS solicitations, and the
19 performance of the utilities in conducting those
20 solicitations.

21 Different planets, as I observed.

22 MR. ALVAREZ: Well, different structures
23 and different regulatory and different market
24 views. Thank you.

25 CHAIRPERSON DESMOND: Mr. Alvarez, I

1 appreciate your comments. I did notice a hand go
2 up in the back for one additional speaker. Mr.
3 Kelly, you stood up and indicated you also wanted
4 to -- still do or don't?

5 MR. KELLY: Yes, I do, thank you.

6 CHAIRPERSON DESMOND: Okay.

7 MR. KELLY: Fortunately, not on this
8 subject. But I did want to follow up on Mr.
9 Skowronski's comments, and then Mr. Geesman's
10 comments on the SEP payment.

11 Mr. Geesman indicated that there is a
12 potential solution to the Legislature, which would
13 be helpful. If that is not a vehicle, for
14 whatever reason, for solving this problem, another
15 solution for providing the means to secure ties or
16 finance the SEP payments is if this agency would
17 use its good offices to impress upon the Public
18 Utilities Commission that language in their rules
19 and decisions that would indicate that the
20 ratepayers to the utilities will stand behind the
21 contracts, including the SEP payments, if they're
22 not available or go away during the course of that
23 period, might help the financial community finance
24 these contracts.

25 That's not there yet. And the comments

1 that Mr. Skowronski made are comments that I'm
2 hearing from developers, as well. And we're
3 presenting that to the Commission now. But this
4 agency could go a long way in trying to enforce
5 the importance of getting some backing behind
6 the -- to solidify the uncertainty about those
7 deals. And I think you can do that through kind
8 of some sort of comments about ratepayer backing
9 utility support for the full terms of the
10 contract.

11 CHAIRPERSON DESMOND: It's a helpful
12 suggestion. And I know this Commission has never
13 shied away from making recommendations to the PUC.

14 Any further discussion. With that,
15 Commissioner Geesman.

16 COMMISSIONER GEESMAN: Mr. Chairman, I
17 would move that we approve the guidebooks
18 referenced in items 8, 9 and 10.

19 And I'd certainly compliment Ms. Raitt
20 and the rest of the renewables staff and Mr.
21 Herrera for the outstanding work they've done over
22 the course of the last five or six months in
23 updating these guidebooks.

24 And I would also thank the various
25 representatives from the industry and other

1 stakeholder organizations that have helped us to
2 do that.

3 COMMISSIONER BOYD: I'll second that
4 motion, since Commissioner Pfannenstiel is not
5 here, as the other Member of the Renewables
6 Committee, but as a former member of that
7 Committee, I want to add my compliments to the
8 staff.

9 I know how much work goes into this
10 effort and I think they've done a very good job
11 indeed. So, it's with pleasure that I second the
12 motion.

13 MR. CHAMBERLAIN: Mr. Chairman, just for
14 clarification.

15 CHAIRPERSON DESMOND: Mr. Chamberlain.
16 Procedurally do you want to take these up one at a
17 time?

18 MR. CHAMBERLAIN: No, no, I just want to
19 be sure that the motion includes the errata that
20 were discussed.

21 CHAIRPERSON DESMOND: Thank you.

22 COMMISSIONER GEESMAN: Yes, it does.

23 CHAIRPERSON DESMOND: Okay.

24 COMMISSIONER BOYD: The second does, as
25 well.

1 CHAIRPERSON DESMOND: Thank you. With
2 that I'll call for the vote.

3 All those in favor?

4 (Ayes.)

5 CHAIRPERSON DESMOND: Opposed? So
6 moved. Thank you, Ms. Raitt, Mr. Herrera.

7 MS. RAITT: Thank you very much.

8 CHAIRPERSON DESMOND: Agenda item number
9 11, which is the 2005 appliance efficiency
10 regulations amendments and possible adoption of
11 the proposed amendments to the 2005 appliance
12 efficiency regulations, docket number 05-AAER-2,
13 published as express terms of proposed regulations
14 in the 15-day language. Mr. Flamm.

15 MR. FLAMM: Good morning, Commissioners.
16 Thank you for the opportunity to present this.
17 I'd also like to acknowledge the National
18 Electrical Manufacturers Association for their
19 continued efforts, and the Pacific Gas and
20 Electric Company for their continued technical
21 support, as well as the California Lighting
22 Technology Center.

23 The proposed amendments to the appliance
24 efficiency regulations are a continuation of
25 amendments that were adopted in December 2004.

1 They have been informally identified as tier one
2 and tier two standards.

3 The tier one standards were adopted in
4 2004. The Energy Commission directed the Energy
5 Efficiency Committee to work further on the tier
6 two items, which is what we are bring for possible
7 adoption right now.

8 There are basically four components.
9 There's regulations for general service
10 incandescent lamps, tier two standards, that are a
11 little more efficient than the tier one standards
12 that were already adopted.

13 There are regulations for incandescent
14 reflector lamps, as well as for metal halide
15 luminaires. Both a lamp standard and a ballast
16 standard. As well as minor clarifications and
17 corrections for hot food holding cabinets, power
18 supply accessories, walk-in refrigerators and
19 freezers, and pools and spas.

20 Thank you.

21 CHAIRPERSON DESMOND: Thank you. I'd
22 note that we do have two public speakers, but
23 first any questions or comments from the
24 Commission?

25 Let me ask Mr. Pete Palm with Western

1 Pacific Distribution.

2 MR. PALM: Yes, sir. I want to talk
3 about the language on the walk-in coolers. They
4 had stated that they wanted to add floors and
5 doors. And we're wholesalers in the industry.
6 And with the new laws in 2006, the consumer is
7 paying a considerable -- considerably more money
8 now than they were last year.

9 Just to give you a rough idea, and these
10 are wholesale costs, 10-by-10 walk-in cooler last
11 year would have cost, just the panel without the
12 refrigeration, roughly \$3700. The increase, if we
13 were to add this, would be roughly \$6,100. So we
14 feel that it's pretty substantial to the consumer.

15 Also, the gains doing the calculations
16 through ASHRAE, we find that the refrigeration
17 systems do not change in size. So, we feel that
18 the gains aren't very much.

19 But, also, the enforcement is very very
20 difficult. It's hard, in replacement situations,
21 to see the difference between the inside of a
22 gavalan wall between styrofoam or a more efficient
23 wall. So there's a lot of business being lost by
24 us that are trying to comply with the new laws
25 right now.

1 We've seen a considerably drop, and we
2 know it's because costs were considerably higher.

3 CHAIRPERSON DESMOND: Is staff available
4 to respond to that?

5 MR. MARTIN: Michael Martin. The
6 proposal today is strictly to add a definition of
7 what the envelope was. We used the term without
8 defining it. And the item that we have here is to
9 include walls and ceilings, but not doors and
10 floors.

11 We are continuing to look into what
12 other changes might be made. But this is the
13 limit today, the clarification of the term that we
14 failed to define before.

15 CHAIRPERSON DESMOND: Thank you, Mr.
16 Palm. Does that address the concerns that you
17 have?

18 MR. PALM: Yes, as long as we don't put
19 the floors and the door on the coolers.

20 CHAIRPERSON DESMOND: And I understand
21 from staff that is not being proposed here. Thank
22 you.

23 Next speaker then is Gary Ulstrom (sic)
24 with PG&E.

25 COMMISSIONER ROSENFELD: Fernstrom.

1 CHAIRPERSON DESMOND: Fernstrom; it's
2 the handwriting, you know, --

3 COMMISSIONER ROSENFELD: Gary, do you
4 have a favorite way of pronouncing that in
5 Scandinavian?

6 (Laughter.)

7 MR. FERNSTROM: No, but I'm working on
8 it. Thank you, good morning, Commissioners. I'm
9 Gary Fernstrom, Senior Program Manager with
10 Pacific Gas and Electric Company.

11 About a decade ago I developed PG&E's
12 codes and standards program. And over the last
13 ten years we've been advocating for improvements
14 on building and energy efficiency standards in the
15 state.

16 I'd like to comment on a couple of
17 things. I'd like to make some generalized
18 comments on how difficult it is to bring about
19 efficiency improvements when dealing with large
20 national industry institutions such as NEMA. And
21 then I'd like to read into the record some
22 specific comments with respect to this proposed
23 decision.

24 So, on the former issue, when we were
25 advocating for the tier one improvements for

1 lighting, we were astounded that NEMA alleged that
2 some of the published data on light bulbs, that is
3 their lumen output and watt input, might not be
4 correct.

5 And in order to counter that allegation,
6 since our recommendation was based largely on a
7 survey of published data, we hired the Lighting
8 Research Center to test a hundred light bulbs.
9 And found that, indeed, light bulbs do perform as
10 advertised.

11 So I give this example to show that
12 industry's arguments in these cases are many times
13 allegations, and the proponents of energy
14 efficiency improvement are forced to do laboratory
15 testing or provide factual data to counter the
16 industry allegations.

17 The second example I'd like to give has
18 to do with the issue that is being decided this
19 morning, or part of the issue, anyway, and that is
20 for modified spectrum lamps.

21 Industry has alleged that modified
22 spectrum lamps are a niche product and are not
23 found in large numbers at comparable low prices
24 with other everyday products like softwhite light
25 bulbs and standard incandescent light bulbs.

1 PG&E did a market survey and found that,
2 in fact, these modified spectrum lamps that are
3 scheduled to be exempted in today's action, are
4 available broadly. In fact, they can be found at
5 Walmart in both Durango, Colorado and the San
6 Francisco Bay Area for 42 cents each in four
7 packs, sitting right alongside the softwhite and
8 standard lamps on the shelf.

9 So, industry again has made an
10 allegation here with no facts to back it up. The
11 proponents for energy efficiency improvement, PG&E
12 did a market study, found these products on the
13 shelf. And the Commission seems to be inclined to
14 agree with the industry that these products are
15 niche products.

16 I just give you these as two examples of
17 how difficult it is, given the codes and standards
18 process, for the advocate to bring forward
19 information that results in positive improvement.

20 Lastly, NEMA just recently alleged that
21 they had built a krypton-filled lamp, and it
22 failed to meet their expectations, failed to meet
23 the performance that would be indicated by
24 published literature that has been in existence
25 for 50 years about the performance of incandescent

1 lamps, and failed to meet PG&E's expectations of
2 efficiency performance.

3 I find that hard to believe. I think I
4 could probably build a krypton-filled lamp in my
5 garage that would fail to meet expectations. So,
6 I think the challenge here is to come up with
7 something that does perform as the published data
8 would indicate that it could.

9 So, having made the point about the
10 difficulty of bringing about energy efficiency
11 improvement, let me read my brief remarks here
12 with regard to this action today.

13 First, I'd like to thank the CEC Staff
14 and the Efficiency Committee Members for their
15 hard work seeing these tier two standards through
16 to completion. This has been a lot of hard work
17 for all of us, and I know everyone has addressed
18 it with their best intentions and utmost effort.

19 The tier two general service
20 incandescent and metal halide luminaire ballast
21 standards have been under development since
22 sometime in 2002. So we've all been at this a
23 long time. By adopting these standards today the
24 Commission affirms the large cost effective and
25 feasible savings opportunity associated with these

1 lighting products.

2 We're pleased to see these standards and
3 language for these measures being positioned for
4 adoption today.

5 With respect to metal halide luminaire
6 ballasts, we had pushed for standards that
7 emphasized broader deployment of electronic
8 ballasts. While we wished that the bar was higher
9 than the 88 percent finally set forth, we believe
10 that it's important to make allowances for the new
11 generation of electronic ballasts for ceramic
12 metal halide lamps, which offer a variety of
13 energy efficiency benefits.

14 Despite our support for the intended
15 results of the general service lamp standards,
16 we're concerned about the ultimate impact of these
17 standards as crafted. For example, the standards
18 language now being adopted will only deliver the
19 full intended benefits if manufacturers elect to
20 meet the spirit of the standard, in addition to
21 the letter of the standard.

22 We would have preferred an approach
23 where the standard required the desired outcome,
24 that is lower wattage while maintaining the
25 original lumen output.

1 We're concerned that market forces will
2 be such that even well intentioned manufacturers
3 may be forced to retreat to the dimmer bulb
4 approach that meets the letter but not the spirit
5 of the standard. We feel the outcome of these
6 standards will be lamps that are not only dimmer,
7 but less efficacious than lamps sold today.

8 Similarly we're very concerned about the
9 threat to overall savings anticipated for the
10 general service standard from growth in low
11 efficacy modified spectrum segment lamps, which
12 the CEC has now elected to exempt from the
13 standards.

14 Given the recent aggressive pricing for
15 modified spectrum lamps found in visit after visit
16 to major retailers, we worry that other
17 manufacturers may be drawn into the fray, and that
18 individual manufacturers will become powerless to
19 slow the market share growth of this product
20 category.

21 So we urge the Commission to closely
22 follow sales trends and act swiftly to close the
23 modified spectrum loophole at the first sign of
24 optimistic market -- pardon me, opportunistic
25 market share growth. Furthermore, PG&E will seek

1 to reintroduce its tier two language as part of
2 its 2008 appliance standards advocacy efforts to
3 insure that lamp efficacy is increased rather than
4 decreased.

5 So, in sum, we're not opposing the
6 adoption of these standards, but our observation
7 is it's very very difficult to bring about
8 improvement, and I'm not sure that we have the
9 best resolve yet. And we're looking forward to
10 being able to address this again in the next
11 standards go-round.

12 Thank you.

13 CHAIRPERSON DESMOND: Thank you for
14 those comments. Commissioner Rosenfeld.

15 COMMISSIONER ROSENFELD: Gary, first I
16 want to thank you for your eternal vigilance.
17 It's been a hugh pleasure working with PG&E. And
18 although you know this, just for the sake of the
19 rest of the people in the room, today's adoption
20 order does include paragraph four, which does
21 address the data collection issue on this alleged
22 niche market. And that's part of the record.

23 So, we will watch it. Thank goodness we
24 have the tradition of updating these standards
25 every three years.

1 What I wanted to ask you to do is, we
2 had only adopted the niche market issue for the
3 niche market lamps. Your concern is a very valid
4 one that either large American manufacturers will
5 produce dimmer lamps and lower wattages instead of
6 doing the great thing of adding krypton or some
7 other trick and giving us the same lumens for less
8 watts.

9 I hope that PG&E will continue to
10 monitor that. That's not something that we need
11 official sales data on. You have gone out to, I
12 think you said, what, Walgreen's and -- I've
13 forgotten which two stores you mentioned --

14 MR. FERNSTROM: I mentioned Walmart, I
15 didn't mention Home Depot, but we looked at both
16 of those.

17 COMMISSIONER ROSENFELD: Okay, you did
18 that. Bless you. Please keep it up. And keep
19 pressing us to do the right thing and correct --
20 if we've been too naive in the '05 standards,
21 we'll address it in 2008. So, thank you very
22 much.

23 MR. FERNSTROM: -- for your hard work on
24 this issue.

25 CHAIRPERSON DESMOND: Gary, I have a

1 follow-up question. You made reference to a
2 couple -- of market share of the modified spectrum
3 lamps, but I didn't hear a figure. Is it 5, 10,
4 15 percent? Do we have a sense of what that might
5 be?

6 MR. FERNSTROM: I didn't give a specific
7 number because that information is unavailable. I
8 did give the cost and the observation that they're
9 sitting on the shelf right next to other mainline
10 items in the lighting business.

11 CHAIRPERSON DESMOND: You've done
12 obviously a lot of good market research work in
13 this area. When consumers are faced with those
14 choices at the point of purchase, generally I
15 would imagine they're thinking in terms not of
16 lumens, but they equate watts with lumens.

17 So are we looking at packaging issues
18 that would present a 60 versus a 54, even with the
19 krypton, where people might assume and not look to
20 the lumen output? Or how is that being addressed?
21 In other words, how do you encourage people to buy
22 more efficient lamps if they're used to only
23 making that decision based on rated wattage?

24 MR. FERNSTROM: PG&E's hope, and I
25 believe the Energy Commission's hope, is that

1 public education will encourage customers to buy
2 the better reduced wattage lamps.

3 However, if you look at the enhanced
4 spectrum lamps now, they're very brightly packaged
5 and have the comment that they provide a higher
6 quality of light to consumers despite the fact
7 they're the least efficacious products on the
8 market.

9 We believe that if consumers are seeking
10 higher quality light, they should be looking at
11 compact fluorescent lamps which give high color
12 rendering indices, and also very careful control
13 over color temperature.

14 CHAIRPERSON DESMOND: Thank you.
15 Commissioner Geesman.

16 COMMISSIONER ROSENFELD: I'm sorry, I
17 will make the remark, Chairman Desmond, we are
18 working with Flex-Your-Power and with industry to
19 do what I think is a grand experiment, which is to
20 try our darndest to get people to look at lumens
21 and not watts.

22 We would hope, in California at least,
23 with this experiment that when you get to the
24 supermarket or the store, that the first thing
25 that hits your eye is the new 54 watt lamp with

1 the unreduced lumens. And you just don't even see
2 in general service lamps the old 60.

3 Then comes the terrible problem of the
4 niche market and the -- well, we just have to
5 watch it. So, we're trying an experiment. It's a
6 great experiment.

7 And before we quit, I want to thank not
8 only the staff, but the hugely long hours of John
9 Wilson and Tim Tutt in working this through and
10 trying to get this experiment going. Sometimes I
11 don't see John for a week at a time because he's
12 working on this; and the same goes even more for
13 Tim Tutt.

14 MR. FERNSTROM: It's only a light bulb,
15 but we've all really agonized over this.

16 CHAIRPERSON DESMOND: Well, I appreciate
17 that, and appreciate the discussion, the details
18 on what we would categorize as same light-less
19 billing, not to make a reference for those of you
20 who remember the --

21 (Laughter.)

22 CHAIRPERSON DESMOND: Commissioner
23 Geesman, you had --

24 COMMISSIONER GEESMAN: I'll wait for
25 Commissioner Rosenfeld's motion.

1 COMMISSIONER ROSENFELD: I move the
2 item.

3 COMMISSIONER GEESMAN: I'll second it.
4 I do want to say, though, Gary, that my views, I
5 think, are a little closer to yours, or probably a
6 lot closer to yours than the standards that we're
7 adopting now.

8 And I really want to reiterate what
9 Commissioner Rosenfeld said to you in terms of
10 please monitor this dim bulb scenario. And if you
11 see that manifesting itself, bring that to our
12 attention.

13 I look forward to your involvement in
14 the '08 cycle of standards. I really want to
15 compliment what you and your group within PG&E
16 have been able to accomplish. I think you enjoy
17 immense credibility with us and with others of
18 similar ilk around the country. I wish more of
19 them were in your industry.

20 But, I just want to encourage you to
21 keep on pushing us. You've made a real
22 contribution to this effort, and I think that all
23 of us are grateful to you and your management for
24 allowing you to do that.

25 MR. FERNSTROM: Thank you very much.

1 COMMISSIONER ROSENFELD: Before we vote,
2 I also forgot to notice Chris Calwell, the other
3 unsung -- no, pretty well sung, hero in this.

4 (Laughter.)

5 COMMISSIONER ROSENFELD: -- is sitting
6 here, and, Chris, thanks a lot.

7 CHAIRPERSON DESMOND: Thank you.

8 COMMISSIONER BOYD: I think we have to
9 be careful with the dim bulb references, though,
10 Commissioner Geesman.

11 (Laughter.)

12 CHAIRPERSON DESMOND: So we're looking
13 for a motion.

14 COMMISSIONER ROSENFELD: I think I moved
15 it.

16 COMMISSIONER GEESMAN: And I seconded.

17 CHAIRPERSON DESMOND: Oh, thank you, I'm
18 sorry. In that case I'll call for the vote.

19 All those in favor?

20 (Ayes.)

21 CHAIRPERSON DESMOND: Opposed? So
22 moved. Thank you.

23 Moving on, minutes, the approval of the
24 April 12, 2006 business meeting.

25 COMMISSIONER ROSENFELD: I move the

1 minutes.

2 COMMISSIONER BOYD: Second.

3 CHAIRPERSON DESMOND: All those in
4 favor?

5 (Ayes.)

6 CHAIRPERSON DESMOND: Opposed? So
7 moved.

8 Item 13, Committee presentations and
9 discussion on behalf of the Commission. I know we
10 have several items. Some, I want to take a moment
11 here, and address.

12 First off, the Commission has received a
13 number of indications over the last several months
14 about the challenge on renewable energy
15 development and the cost impacts of credit
16 policies. This, in fact, was raised most recently
17 again by Mr. Kelly in the audience at the Joint
18 Energy Agency Action Plan meeting.

19 What I wanted to discuss today is to let
20 the other Commissioners know that the Electricity
21 Committee, Commissioner Geesman and myself, have
22 been working on this issue for some time. And
23 what I wanted to note is that we are now planning
24 to hold a workshop to address the credit issues
25 and the credit policies that are imposed for both

1 new and repowered generation facilities in
2 California, with particular emphasis on renewable
3 energy.

4 Obviously these credit policies have an
5 impact on the cost of generation and financing.
6 We obviously have to balance appropriate financial
7 protection against the needs for encouraging new
8 facilities and insuring that consumers can benefit
9 from these lower costs.

10 The purpose of the workshop is to bring
11 together investment bankers, power plant
12 investors, portfolio managers, insurance
13 companies, developers, risk managers and the
14 investor-owned and publicly-owned utilities to
15 address credit policies for projects in
16 California.

17 What I would indicate is we're looking
18 to cover six topics in that workshop. The first
19 is to examine how the credit policies in other
20 states compare to California.

21 Secondly, we're looking to characterize
22 how California's current credit policies
23 contribute to project costs in terms of real
24 dollars. We're looking to explore the extent to
25 which these policies impede generation project

1 development, including renewable projects.

2 We're looking to identify a set of
3 prudent solutions that would satisfy present
4 credit policies, while lowering the effective cost
5 of capital. And including an exploration of
6 modified step-in rights, insurance products, risk
7 pooling and letters of credit.

8 We want to quantify the range of
9 potential savings to ratepayers of one or more of
10 these actions. And lastly, we want to be looking
11 at topics for future research and establish next
12 action.

13 So I just want folks to know that we
14 have been listening very carefully and we will be
15 taking this issue up and expect to then, from that
16 workshop, produce a summary report.

17 So, if anyone wishes to -- Mr. Kelly.

18 MR. KELLY: That's wonderful news to
19 hear that you're doing this. I am working with
20 the PUC on similar kind of things, trying to move
21 things forward.

22 Do you have a date for this workshop?

23 CHAIRPERSON DESMOND: I think we're
24 going to publishing the notice next week. It'll
25 be late June, I think, is the target that we have.

1 MR. KELLY: That'd be good. I just
2 recommend, I would like to try to bring some very
3 senior finance people from development arms of
4 these companies, many of which are located out of
5 state. Being able to tell them far enough in
6 advance to prepare for this, and arrange their
7 schedules would be very helpful.

8 CHAIRPERSON DESMOND: That would be very
9 helpful. I would encourage you to contact the
10 Committee. I know Chuck Najarian in my office has
11 been coordinating that. And we have, in fact,
12 been in touch with many people out of the State of
13 California on this. So it would be good to
14 compare notes.

15 MR. KELLY: I drug a couple from the
16 east coast out to talk to CPUC --

17 CHAIRPERSON DESMOND: Yes.

18 MR. KELLY: -- Staff, and it was --

19 CHAIRPERSON DESMOND: Great.

20 MR. KELLY: -- it worked well.

21 CHAIRPERSON DESMOND: Excellent, thank
22 you. So, again, I want to thank Commissioner
23 Geesman, as well, for his work on that.

24 Second item, Commissioner Geesman.

25 COMMISSIONER GEESMAN: We wanted to give

1 a presentation from the Renewables Committee.
2 Basically a repeat of a briefing that Commissioner
3 Pfannenstiel and I received from Competitive
4 Energy Insight on some PIER-supported work on
5 combined heat and power applications.

6 COMMISSIONER BOYD: Mr. Chairman, before
7 moving to that, could I mention just a couple
8 things quickly --

9 CHAIRPERSON DESMOND: Of course.

10 COMMISSIONER BOYD: -- before getting a
11 formal presentation.

12 As you know only too well, yesterday the
13 Governor issued his executive order on the
14 bioenergy, following up on the report that we
15 submitted at the end of March. And that was a
16 very significant event, day for us. And the
17 Chairman hosted a couple of telephone call
18 briefings that I listened in on, and did a very
19 good job. Plus there was a press conference over
20 in the Capitol where this issue was brought up.

21 So, today I've received several emails
22 from hardline advocates over the years who thought
23 yesterday was a real banner day for the effort and
24 for the Energy Commission. So I thought it was
25 deserving of note, and, of course, we have

1 committed to helping the Governor with a detailed
2 action plan in the very near future, which we look
3 forward to.

4 Secondly, I represent the Commission on
5 the California Fuel Cell Partnership. The
6 Commission is a member, a long-time charter member
7 of the Partnership. And this past Saturday the
8 President paid a visit to the Fuel Cell
9 Partnership to highlight the, on earth day, as a
10 matter of fact, to highlight the issue of
11 certainly of fuel cells and hydrogen.

12 But in the very brief moment I had with
13 him I thanked him for his references in his speech
14 and in his Saturday morning radio broadcast to the
15 subject of plug-in hybrids. He pushed it very
16 hard. And I thanked him for noting that there are
17 other technologies, some other things we need to
18 do in the short term before crossing the bridge to
19 the hydrogen future.

20 So I thought that was a very positive
21 thing. It didn't get any press, unfortunately,
22 either levees or hydrogen got all the press. But,
23 nonetheless for those of us who want to make a
24 point of plug-in hybrids, which this agency did in
25 its Integrated Energy Policy Report, I think that

1 was a significant concession, I'll say, on the
2 President's part to indicate there are other
3 technologies that we should be pushing real hard.

4 CHAIRPERSON DESMOND: Commissioner Boyd,
5 I appreciate that. I'd also, for the record, note
6 that you're being modest. You deserve much of the
7 credit for the work of the Interagency Biomass
8 Collaborative. And so, equally deserve to be
9 acknowledged and recognized for that.

10 I'd also point out that Commissioner
11 Rosenfeld is due to be recognized this Friday, I
12 understand.

13 COMMISSIONER ROSENFELD: Yeah.

14 CHAIRPERSON DESMOND: We'll save that
15 for another time.

16 COMMISSIONER BOYD: Something to do with
17 80 years of age?

18 CHAIRPERSON DESMOND: I think we're all
19 set; we'll move into the presentation then.

20 MR. RAWSON: My name's Mark Rawson from
21 the Public Interest Energy Research program here
22 at the Commission. Thank you, Commissioner
23 Geesman and the Renewables Committee, for giving
24 us the opportunity to highlight some topical
25 research results that PIER has funded this last

1 year.

2 With me is Steve Provol from Competitive
3 Energy Insight. He's the contractor that
4 performed this analysis for the Energy Commission.

5 The Commission funded this analysis to
6 look into what economic drivers affect the
7 feasibility of CHP projects in California from the
8 owner's perspective. CHP-related topics have been
9 a high point in the 2005 IEPR discussion around
10 distributed generation used in combined heat and
11 power applications. It's also a key component of
12 California's loading order.

13 And so this study's investigation into
14 CHP deployment-related issues has uncovered some
15 interesting findings around economic and
16 institutional barriers that are hampering,
17 potentially hampering the implementation of CHP in
18 the state, that are worth having a discussion
19 about.

20 Also for the record, this project was
21 just recently completed at the end of March.
22 Staff is in the process of getting the final
23 report for this project published. We expect it
24 to be published and posted on the Energy
25 Commission's website within a few weeks.

1 There is a handout of Mr. Provol's
2 presentation that he's making, on the table out
3 front. And you can look at the PIER website here
4 in the coming weeks when the report is made
5 available. Thank you. Steve.

6 MR. PROVOL: Thanks, Mark. Good
7 morning, Commissioners. Can you hear me okay?

8 CHAIRPERSON DESMOND: Yeah.

9 MR. PROVOL: Okay, well, I appreciate
10 the opportunity to meet with you today. And as
11 Commissioner Geesman indicated, this is a follow
12 up to a discussion that we had a couple of weeks
13 ago.

14 The analysis that I'm going to present
15 to you was the product of some work that was
16 performed using a commercially available set of
17 software tools. These are tools that our company
18 provides. CEC is a subscriber to these.

19 And they're really applicable, the
20 objective here is to look at the economics of
21 ownership in these various technologies from the
22 perspective of the parties that got to live with
23 and invest in these things.

24 And I think, as Mark indicated, the
25 study has yielded some pretty interesting results

1 that show the counter-influences that a policy, as
2 opposed to what the regulatory climate currently
3 is. And hopefully we've got some recommendations
4 here that can help to improve that situation.

5 In the discussion I'll give you a very
6 brief background on the nature of the study; talk
7 some about the findings, especially focusing on
8 what the major impacts are. And provide some
9 recommendations. And, of course, be here and
10 happy to answer any questions or any follow up
11 that you might have.

12 The fundamental assumption at the start
13 of the study was, in fact, that CHP is a good
14 thing. And it's something that, as a result of
15 the integrated energy policy, is something that
16 the state desires to see implemented more broadly.

17 It's important that we focused on the
18 impacts of CHP ownership and that study is not an
19 analysis of the justification or basis of utility
20 tariffs. Or the impact of those tariffs on
21 ratepayers more broadly, but specifically focusing
22 on if I've got to invest in, or I'm interested in
23 one of these facilities, am I motivated to do
24 that.

25 We looked at two primary applications.

1 These are commercial buildings. And based on
2 tariffs as of last spring, late spring last year
3 and January of this year, which we'll talk about
4 some of the changes in that regulatory
5 environment, and also we looked at dairy-based
6 anaerobic digesters, which clearly have an
7 environmental motivator as well as economic.

8 The study parts included interviews with
9 the electric utilities and stakeholders throughout
10 the industry; computer modeling using the tools
11 that I just referenced; and then sensitivities to
12 try and isolate and quantify the impacts of these
13 various factors.

14 You know, starting, frankly, with the
15 bad news, and that's that currently tariffs
16 generally are disincentivizing to CHP investments.
17 And I think what you'd find is that projects that
18 were previously attractive under rates as recently
19 as last summer, are not currently under current
20 rate structures.

21 This is especially true in SDG&E and
22 PG&E's service territory. More broadly in SCE
23 service territory because of the very low offpeak
24 rates, and offpeak rates, by the way, you know,
25 represent probably 60 percent of the operating

1 hours of these facilities. Having very very low
2 offpeak rates becomes a disincentive for
3 facilities that are driven primarily by energy
4 offsets as their motivator, especially if 60
5 percent of the time it's uneconomic to operate.

6 Similarly, the net metering biorates
7 applicable for projects like agricultural waste
8 projects at dairy farms often the net metering
9 rates are lower than the marginal cost of
10 operation of these facilities, which means that
11 owners who are being rewarded by recovery for
12 selling energy back to the utility oftentimes are
13 being paid not only less than their own operating
14 costs, but at the same time purchasing power under
15 other meters on their system at a substantially
16 higher rate.

17 And then finally we'll talk about
18 departing load exemptions. This is perhaps less
19 consequential than all the others, but still an
20 important and easy, I think, item to fix. And
21 that's that under the current approach projects
22 under 1000 kW size are exempt from departing load
23 charges. Projects over are mandated to pay those
24 charges.

25 What this results in is a step change

1 that a project of 999 kW can receive the benefits
2 of a project, yet a project of 1001 kW all of a
3 sudden now must pay all these charges.

4 And I've seen cases in the industry, in
5 fact I'm working on one right now, where it
6 motivates the owner to a less than most efficient
7 application in order just to try and get under
8 that 1000 kW limit. And we'll propose some
9 alternatives to that that might perhaps soften
10 that impact.

11 Another factor that I think has had
12 significant impact on CHP, especially moving as
13 we've moved over the past several years, is
14 there's been a substantive shift in the tariffs
15 from energy to demand rates. So what we see is
16 declining energy rates and increasing demand
17 charges.

18 And since the energy charge is, in fact,
19 the primary motivator for CHP applications,
20 because it's the kilowatt hours sold or the
21 kilowatt hours produced that produces the primary
22 revenue or savings source for these projects, as
23 rates shift from energy to demand you see a
24 substantial reduction in the incentive for CHP
25 applications.

1 This is especially also true, the fact,
2 as we all know, that gas prices have been quite
3 volatile over the last 12 months. Now, good news
4 is they're tending to moderate some. We'll see
5 what the hurricane season does this summer.

6 But as a result of that, as energy rates
7 are declining the costs of fuel for CHP owners are
8 going up. And so we're seeing an increasing
9 disparity in what's often referred to in the
10 industry as the spark spread, which is the
11 difference between the cost of electricity and the
12 cost of the fuel to generate that.

13 And in this case for a CHP owner that
14 results in potential losses as a result of
15 operating the facility.

16 Demand charges are another important
17 part of the tariff, and these are very -- well,
18 costs are shifting to this category, this is a
19 component that's very very difficult for the CHP
20 owner to monetize under the current environment.

21 And the reason is, for example, the 15-
22 minute metering rate, one 15-minute outage in a
23 given month can result in loss of all those demand
24 savings for that particular facility for the
25 entire month.

1 Similarly, second outages or third
2 outages no longer matter oftentimes because once
3 the damage is done on the first outage, there's no
4 longer incentive for the facility to continue
5 necessarily to avoid outages.

6 Noncoincident demand charges, which are
7 charges that are not time-related, are even more
8 damaging because that means the facility, even if
9 it goes offline at midnight for planned outages,
10 might result in, or would result in losses of
11 those savings for the entire month.

12 And as a result the cumulative effect of
13 these is that these strategies or regulatory
14 policies ultimately discourage or prevent the
15 owner from utilizing load following strategies,
16 much like the utilities use to optimize their own
17 operations where they might, for example, drop
18 load at times when their thermal requirements
19 might drop. And therefore one of the big benefits
20 of a CHP facility might be less because they're
21 penalized on the electric side. So there's
22 conflicting signals and objectives there.

23 And then finally standby charges add to
24 fixed costs for these facility owners. Adding to
25 fixed costs when they're rewarded on a net

1 production basis because the energy component
2 conflict with one another and discourage
3 investment in these systems.

4 I guess complementing that I might also
5 mention that it appears that some of the standby
6 charge philosophies don't take account for the
7 fact that there's redundancy when you have
8 multiple CHP systems.

9 Now, recognizing that redundancy depends
10 on what feeder it's located on, and what
11 transmission requirements are, et cetera.
12 Applying a single full capacity standby charge
13 across all facilities means that everyone -- every
14 facility is equally penalized, not accounting for
15 the fact that multiple facilities provide some
16 redundancy on the system.

17 And then finally, for dairy-based
18 digester application, there are potential
19 substantial environmental benefits here, both
20 especially in the air emissions side, but also on
21 the water and on the odor side.

22 The dairies that have the most potential
23 attractive structures are probably located down in
24 SDG&E's territory where we have the best tariffs,
25 but unfortunately there's only one dairy in

1 SDG&E's territory. The other dairies are all
2 located in the more northern parts of the state.
3 And as we'll see in a minute the rates are quite
4 unattractive for those facilities.

5 On the counter side, I think looking at
6 a lot of these facilities, we've seen many have
7 not been designed with the best achievable
8 efficiency. A lot of the electric production is
9 being net metered, and the waste heat isn't being
10 used onsite. And so there's definitely some
11 tactical improvements -- technical improvements
12 that could be made in the implementation of these
13 systems.

14 I'll show you a couple of brief charts
15 here to emphasize this, what these charts are
16 illustrating is the after-tax economics from the
17 standpoint of expenses and savings for these
18 facilities.

19 The bars on the lower section of the
20 chart that are in blue and purple color tend to
21 represent the variable costs. This is the cost of
22 fuel or the savings that the owner would get in
23 terms of energy payments.

24 The yellow bars up at the top represent
25 the fixed costs and/or the fixed component which

1 would be associated with standby charges and
2 demand charges.

3 And you can see here, looking at the
4 relative magnitudes on these charts that, in fact,
5 there's a discontinuity there. The variable
6 expenses for operating the CHP facility compared
7 to the relative savings. And, Rachel, I think we
8 got the chart -- this chart is switched here, this
9 is the old chart. I didn't realize that -- in
10 this presentation. So our expenses and savings
11 are reversed here. I apologize for the confusion.

12 The blue lines are representing the
13 variable operating costs. And you can see the
14 costs for fuel, variable operation and maintenance
15 costs, departing load charges, are substantially
16 greater than the corresponding energy rates that
17 they're paid for.

18 Conversely, the fixed costs for
19 operation of these facilities, which include, you
20 know, investment and capital, debt service, et
21 cetera, are substantially lower than the demand
22 charges.

23 Now, what this means is that when the
24 owner loses the demand savings from this facility
25 as the result of an outage, they're now brought

1 down below a return that it's less than their
2 costs of operation. For example, due to outages.

3 This chart shows a comparison of the
4 demand energy and gas price conditions as a
5 function of conditions last summer and early this
6 winter. And the point here is what you'll see is
7 that, in fact, demand charges have been
8 increasing, energy charges have been decreasing at
9 the same time gas prices are increasing. Which,
10 for the owner of these facilities ultimately puts
11 a stress on their economics.

12 And you can see here the increases in
13 demand rates going -- and this is, in particular,
14 a PG&E tariff, but it applies similarly in the
15 other service territories. The demand rate's
16 increasing, and at the same time energy rates
17 going down, while gas prices are showing
18 substantial increases.

19 Now this is going from January to --
20 from last summer to January of this year. And
21 that's about when we hit a peak in gas prices.
22 They've leveled off. So this has improved to some
23 extent, but nonetheless we still see something
24 like a 20 percent increase in gas prices and a
25 corresponding decrease at the same time in the

1 energy component of the electric rates.

2 Offpeak, as we mentioned, is also a very
3 important consideration here. And this isolates
4 the offpeak component, which represents about 60
5 percent of the operating hours. And the red bars
6 here showing the cost of electric production from
7 natural gas from a typical CHP facility at gas
8 rates as of last year, summer of this year --
9 summer of last year, winter and coming back down
10 more towards where rates are today.

11 The key point here is that when these
12 bars that represent the tariffs are higher than
13 the dashed line, that means the owner is saving
14 money. When they're below, that means the owner
15 is losing money.

16 And you can see here, looking at, in
17 this case, at the PG&E, SCE or SDG&E in offpeak
18 tariffs, while last summertime there were some
19 incentives even to operate during these
20 situations, once we got to electric prices and gas
21 prices in January the situation reversed. And
22 even at the current situation there's minimal or
23 no margin to operate these facilities offpeak.
24 And yet the owner would be penalized if he took it
25 down.

1 The ultimate result is I think that many
2 find the decision why build if I've got to pay
3 that difference.

4 Recommendations. First recommendation
5 that we have is that it would be very very helpful
6 if there could be some standardization of tariffs
7 across the state, recognizing the three utilities
8 each have different situations. Perhaps this
9 might be limited to a specific CHP type of tariff.
10 So there are consistent market pricing signal can
11 be sent across the state to all parts of the
12 industry. I think it would also simplify the
13 decisionmaking processes, both in the financiers
14 and the investors in these projects.

15 The second is that we believe would be
16 very helpful is getting a better parallelism in
17 energy rates with gas rates. Or the fuel cost
18 component that go into electric generation. We
19 might consider, for example, and this wouldn't
20 necessarily be a simplification of rates, and this
21 is where the conflict is between simplification
22 and standardization, but considering that offpeak
23 pricing might be dictated on the marginal energy
24 displaced by the facility, as opposed to the
25 average cost of energy, establishing energy cost

1 mechanisms that synchronize with gas prices, or at
2 least synchronize with overall energy markets.

3 And finally, that net metering rates
4 should reflect the full retail value of the energy
5 as opposed to just the marginal cost of the
6 generation component of the tariff. This provides
7 a great disincentive; it's difficult for dairy
8 farms or farms to always use the energy at the
9 same location where they're generating it behind
10 that same meter. So, net metering becomes a
11 difficult way to reward them.

12 Modifying the methods for assessment of
13 demand charges. One possibility here might be
14 rather than penalizing facilities on a 15-minute,
15 for a 15-minute outage would be to lengthen that
16 period, allowing longer intervals for CHP
17 facilities. Perhaps weekly or daily, for example.
18 That would provide a more level method for
19 assessing those outages.

20 And minimizing, perhaps the emphasis on
21 noncoincident demand charges, which give no time-
22 of-day incentives to the owners at all.

23 And then finally, relative to departing
24 load charges, making those charges perhaps
25 applicable to the first 1000 kW, or the exemption

1 from those charges to the first 1000 kW of
2 production from the facility, as opposed to
3 differentiating between a 999 kW and a 1001 kW
4 facility by now eliminating the benefits.

5 And that way you'd still maintain the
6 motivations for the smaller facilities, but not
7 drive owners towards uneconomic or less-than-
8 optimum facility design.

9 The SGIP program right now provides
10 incentives only upfront. And a program that
11 ultimately aligns with the objectives of the state
12 to motivate production perhaps during certain
13 periods, and then incentivizes operators during
14 the operating phase, I think, would better align
15 with the long-term objectives of the program.

16 Establishing criteria, this is probably
17 a whole new area, but ultimately rather than just
18 FERC efficiency, establishing criteria for CHP
19 facilities that ultimately are deemed to provide
20 net societal benefit. Some mechanism for
21 measuring that.

22 In this way, perhaps special
23 considerations could be provided for those
24 facilities that provide benefits in areas that are
25 transmission constrained. Or in areas where there

1 are substantive improvements in environmental or
2 other externalities that might be a benefit
3 system, could be reflected in rewards to those
4 kinds of projects. To help guide the facilities
5 to those that are most desirable.

6 Consider waiving standby charges. There
7 has been some reference to that. When you look
8 deep into the mechanisms of standby charge waivers
9 now you find that there's an equally or maybe
10 oftentimes more burdensome penalty imposed on the
11 facility owner who gets his standby charges
12 waived.

13 And again, consider programs that offer
14 further externality benefits, CO2 reductions,
15 transmission, et cetera.

16 And then finally, we very strongly
17 recommend the Commission maintain an ongoing
18 proactive approach to looking at tariffs rather
19 than reactive. I think we've seen the current
20 situation right now. We're always looking at the
21 situation after the tariffs are passed and trying
22 to figure out what to do about it.

23 And if a process could be put in place
24 that we could be involved in that process, to help
25 guide the analysis from the perspective of owners,

1 we think that would be helpful.

2 Appreciate your time and be happy to
3 answer any questions.

4 CHAIRPERSON DESMOND: Commissioner
5 Geesman.

6 COMMISSIONER GEESMAN: I'd just make the
7 observation that as we set about attempting to
8 achieve the Governor's greenhouse gas reduction
9 goals for 2010 and 2020, I think we're going to
10 have a reborn interest in the efficiency with
11 which electricity is generated.

12 Everybody agrees efficiency is our top
13 priority in the loading order. But we seem to
14 have overlooked how that gets applied to the
15 generating sector.

16 And I think that it's alarming, the
17 degree of backsliding that we've allowed to creep
18 into our utility rate tariffs over the last
19 several years.

20 I really want to thank the PIER Staff
21 for digging into this. And I think there's a lot
22 more work to be done going forward.

23 CHAIRPERSON DESMOND: Steve, I'd like to
24 thank you, as well. I remember when we spoke
25 about this six, seven months ago, as the initial

1 results began to come in.

2 And like Commissioner Geesman, I'm very
3 troubled by the disconnect between the tariff
4 design and the state policy objectives. And
5 clearly, even consistent with the biofuels and
6 methane and all the other opportunities, we're not
7 going to see any significant increase in CHP
8 unless we're providing the appropriate incentives
9 and disincentives and that those costs accurately
10 reflect.

11 I didn't see in the recommendation, but
12 was wondering if in your conversation with the
13 utilities that they saw an opportunity to look at
14 this from a business case perspective, where there
15 was benefit to them treating these as a
16 distributed asset as part of the utility grid.
17 Has that come up in discussion at all?

18 MR. PROVOL: Well, certainly, you know,
19 the utilities are working very hard to try and
20 grapple with this themselves. And I know there's
21 been others in front of you that have reflected
22 the position that, you know, some of these
23 policies, also the utilities feel like there could
24 be, you know, damaging to them or the ratepayers,
25 et cetera.

1 It wasn't part of the focus of our study
2 to get into the utility dynamics, or their
3 particular place in this. So, I don't really have
4 a full answer to that. Except that, you know,
5 during our discussions, interviews with them, they
6 were careful to emphasize the kinds of issues
7 you're raising.

8 CHAIRPERSON DESMOND: Thank you. Very
9 informative. Commissioner Boyd.

10 COMMISSIONER BOYD: I'd just like to
11 echo all that has been said. Thank you for this
12 presentation. Many here know my long interest in
13 this subject. Commissioner Geesman and I listened
14 to lots of testimony about what the potentials
15 were for CHP. My interest in the subject goes all
16 the way back to the electricity crisis, long
17 before I ended up here as a Commissioner.

18 We're just not capitalizing on the
19 opportunities that present themselves. We heard a
20 lot of testimony about there's a lot more energy,
21 quote, steam or what-have-you, and other forms of
22 motion energy out there available, that could be
23 rolled into CHP, cogen types of operations that
24 we're not even taking advantage of. Or it doesn't
25 look to me like we're even scratching the surface

1 on.

2 So there's a lot of opportunity here. I
3 think Commissioner Geesman is right in indicating
4 that if we can't get this issue moving with the
5 continuous discussions in the Integrated Energy
6 Policy Report, maybe that combined with the
7 Climate Action Team reports and requirements will
8 finally get a little new motion.

9 And if the PUC is to live up to their
10 commitments in the Climate Action Team, maybe we
11 can motivate them to look at the tariff issue a
12 little more in depth than I think to date we've
13 succeeded in doing.

14 So I think this is very relevant, very
15 timely, and I appreciate it.

16 MR. PROVOL: Thank you.

17 CHAIRPERSON DESMOND: Thank you. Unless
18 there's any further comments I'd like to move on
19 then to agenda item number 14, which is the Chief
20 Counsel's report.

21 MR. CHAMBERLAIN: Thank you, Mr.
22 Chairman. I'll simply note that last Wednesday
23 ten of the 11 western governors petitioned the
24 Federal Energy Regulatory Commission to create the
25 regional advisory body for the western

1 interconnection.

2 This body is anticipated to coordinate
3 state and provincial views on reliability issues.
4 As you know, we're moving to a mandatory
5 reliability standards program in the United
6 States. And we need to be sure that that also
7 carries over into the portions of Mexico and
8 Canada that are affected here in the western
9 interconnection.

10 And we hope to convince FERC that this
11 is a valuable thing to them, as well.

12 And I would like to thank Mark Hester
13 who participates on the operating committee for
14 the Western Electricity Coordinating Council.
15 Grace Anderson, who participates on the planning
16 coordination committee. Mike Jaske, who
17 participates now on the loads and resources
18 subcommittee. And Dave Ashuckian, who
19 participates on the market interface committee.

20 I'm hoping that we can attract similar
21 participation by other western energy agencies and
22 public utility commissions. I think we are
23 starting to gather more interest as we move toward
24 the mandatory regime.

25 CHAIRPERSON DESMOND: Thank you. Mr.

1 Blevins.

2 EXECUTIVE DIRECTOR BLEVINS: Thank you,
3 Mr. Chairman. I wanted to briefly note that there
4 have been some staffing changes at the Commission.
5 Mike Smith has been selected as the Commission's
6 Assistant Director for Governmental Affairs.

7 Also Lorraine White has been designated
8 as the Co-Project Manager for both the 2007 Energy
9 Report, and the AB-1007 report.

10 And then finally present in our midst is
11 Harriet Kellemeyn, who is serving now as the
12 Secretariat for the Commission.

13 I would note that all three of those
14 individuals came from Commissioner Row. I would
15 also note that each one of them came from a
16 different office and since I serve at the pleasure
17 of three of you, I hope one of you will forgive
18 me.

19 (Laughter.)

20 CHAIRPERSON DESMOND: Thank you.

21 COMMISSIONER BOYD: I'll think about it.

22 CHAIRPERSON DESMOND: We certainly want
23 to congratulate all those individuals for the fine
24 work they've been doing, and have every confidence
25 they'll be successful in their new roles.

1 Ms. Kim, Public Adviser's report?

2 MS. KIM: I have nothing.

3 CHAIRPERSON DESMOND: Nothing to add,
4 okay. I had one, two last cards regarding public
5 comment here. Cindy Smith from Superior Products.
6 Didn't identify an agenda item, if she's still
7 here?

8 And then, as I said earlier, there was a
9 Peter Spillett from American Water. But, no.
10 Okay.

11 With that we'll conclude this meeting
12 and thank everyone for participating.

13 (Whereupon, at 11:50 a.m., the business
14 meeting was adjourned.)

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